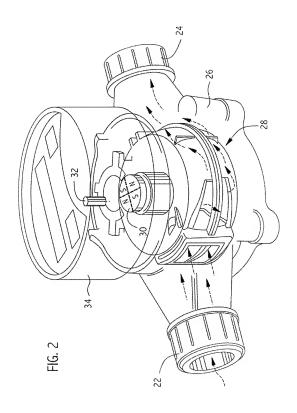


FIG. 1



J

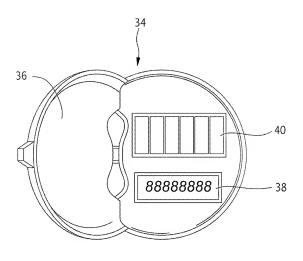


FIG. 3

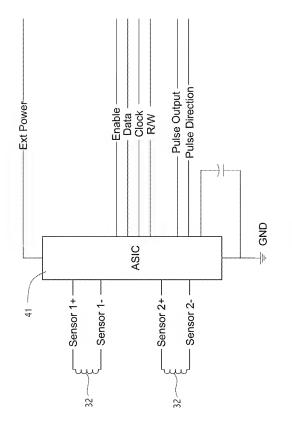
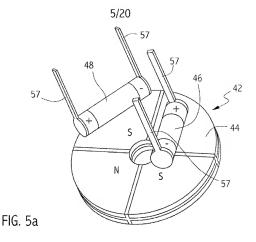
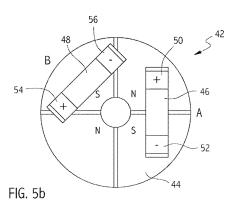


FIG. 4

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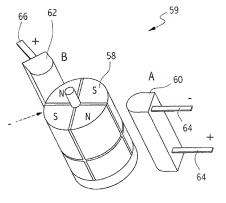


FIG. 6a

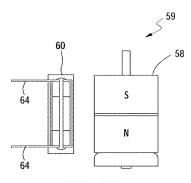


FIG. 6b

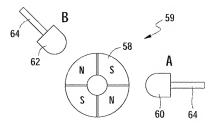
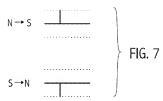
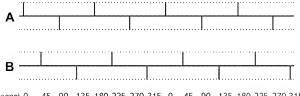


FIG. 6c





Magnet 0 45 90 135 180 225 270 315 0 45 90 135 180 225 270 315 Angle

FIG. 8

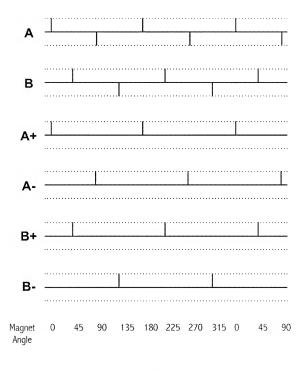


FIG. 9

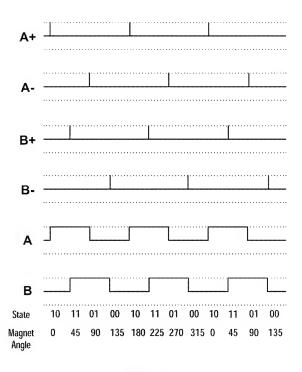


FIG. 10

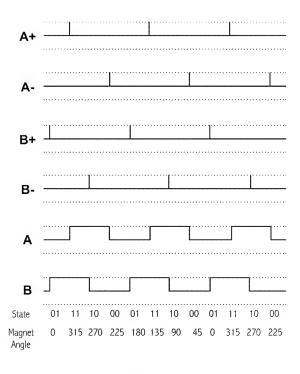


FIG. 11

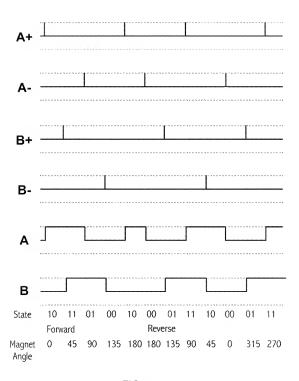


FIG. 12

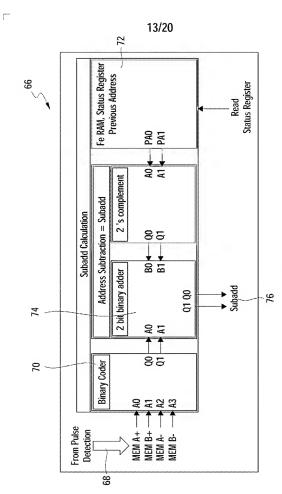


FIG. 13

Sensor Input	Pulse Detection Output	Flow Direction Input
Sensor A+	MEM A+	AO
Sensor B+	MEM B+	A1
Sensor A-	MEM A-	A2
Sensor B-	MEM B-	A3

FIG. 14a

Tracking	Binary Address NA	
Sensor A+	00 (O decimal)	
Sensor B+	01 <i>(1 decimal)</i>	
Sensor A-	10 <i>(2 decimal)</i>	
Sensor B-	11 <i>(3 decimal)</i>	

FIG. 14b

Sensor Input	Binary Address NA	
Sensor A+	00 (O decimal)	
Sensor B+	01 <i>(1 decimal)</i>	
Sensor A-	10 <i>(2 decimal)</i>	
Sensor B-	11 (3 decimal)	
Sensor A+	00 (O decimal)	
Sensor B+	01 <i>(1 decimal)</i>	
Sensor A-	10 <i>(2 decimal)</i>	

FIG. 15a

Sensor Input	Binary Address NA		
Sensor A+	00 <i>(0 decimal)</i>		
Sensor B-	11 <i>(3 decimal)</i>		
Sensor A-	10 <i>(2 decimal)</i>		
Sensor B+	01 <i>(1 decimal)</i>		
Sensor A+	00 <i>(0 decimal)</i>		
Sensor B-	11 <i>(3 decimal)</i>		
Sensor A-	10 <i>(2 decimal)</i>		

FIG. 15b

Occurring Pulse	New Address NA	Previous Address PA	Subadd
Sensor A+	00	11	00-11= 01
Sensor B+	01	00	01-00= 01
Sensor A-	10	01	10-01= 01
Sensor B-	11	10	11-10= 01
Sensor A+	00	11	00-11= 01
Sensor B+	01	00	01-00= 0 1
Sensor A-	10	01	10-01= 01
Sensor B-	11	10	11-10= 01

FIG. 16a

Occurring Pulse	New Address NA	Previous Address PA	Subadd
Sensor A+	00	01	00-01= 11
Sensor B-	11	00	11-00= 11
Sensor A-	10	11	10-11= 11
Sensor B+	01	10	01-10= 11
Sensor A+	00	01	00-01= 11
Sensor B-	11	00	11-00= 11
Sensor A-	10	11	10-11= 11
Sensor B+	01	10	01-10= 11

FIG. 16b

17/20

Pulse	New Address	Previous Address	Subadd
Sensor A+	00		
Sensor B+	Missing	**********	**********
Sensor A-	10	00	10-00= 10
Sensor B+	01		
Sensor A-	Missing	*******	******
Sensor B-	11	01	11-01= 10
Sensor A-	10		
Sensor B-	Missing	**********	********
Sensor A+	00	10	00-10= 10
Sensor B-	11		
Sensor A+	Missing	*******	******
Sensor B+	01	11	01-11= 10

FIG. 17a

Pulse	New Address	Previous Address	Subadd
Sensor A+	00		
Sensor B-	Missing	**********	*********
Sensor A-	10	00	10-00= 10
Sensor B-	11		
Sensor A-	Missing	**********	*********
Sensor B+	01	11	01-11= 10
Sensor A-	10		
Sensor B+	Missing	*********	*********
Sensor A+	00	10	00-10== 10
Sensor B+	01		
Sensor A+	Missing	**********	******
Sensor B-	11	01	11-01= 10

FIG. 17b

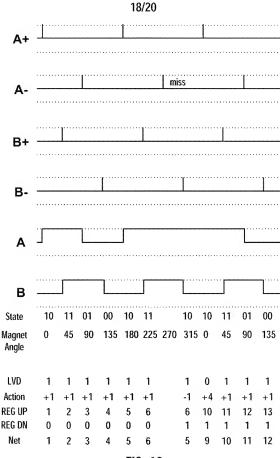


FIG. 18

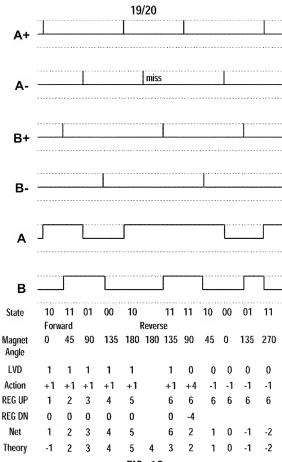


FIG. 19

FIG. 20

